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ARORA et al.(10) **Pub. No.: US 2021/0238929 A1**(43) **Pub. Date: Aug. 5, 2021**(54) **CABLE SYSTEM FOR DOWNHOLE USE
AND METHOD OF PERFORATING A
WELLBORE TUBULAR****Publication Classification**(51) **Int. Cl.****E21B 17/00** (2006.01)**E21B 47/092** (2006.01)**E21B 47/135** (2006.01)(52) **U.S. Cl.**CPC **E21B 17/003** (2013.01); **E21B 47/135**
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(57)

ABSTRACT

A system for providing information through a metal wall employs a device adapted to be arranged on one side of the metal wall and a magnetic-permeability element, provided at, near or connected to the device. The magnetic-permeability element is based on a material having a relative magnetic permeability of at least 2000. The disclosure also provides use of said system. The use may involve the step of optimizing the magnetic-permeability element using equivalent inductive mass (Elm). The system can for example be used to magnetically sense the location of a cable present on the outside of a wellbore tubular using a magnetic orienting tool that is located within the wellbore tubular.

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